4 AWIPS COMMISSIONING PROCESS

The general commissioning process consists of the following three major phases, as illustrated in **Figure 4-1**:

1. Precommissioning Phase
2. Evaluation Phase
3. Recommendation/Approval/Implementation Phase

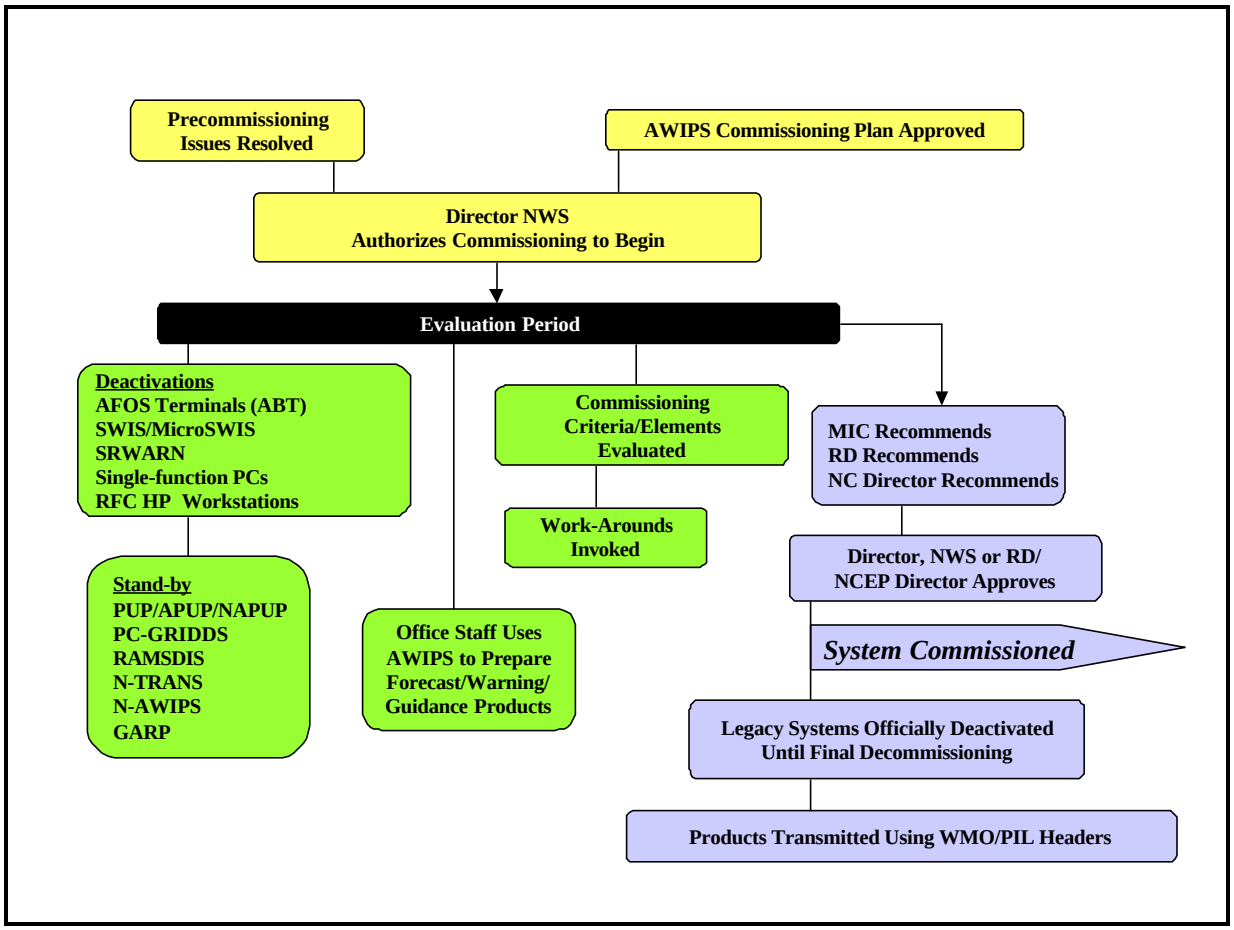

Figure 4-1 Commissioning Phases

The *Precommissioning Phase* is the period of time prior to the commissioning of the initial systems, during which system-related problems and issues are being resolved. The intent of this phase is to focus attention on those aspects of the system requiring corrective actions before the first systems can be commissioned.

The Build 4.2 OT&E has a close relationship with the commissioning evaluation process. The test procedures and methodology used in this OT&E closely match the *Site Component Commissioning Plans: Advanced Weather Interactive Processing System.* The OT&E initiates the commissioning process at the OT&E sites. These sites will follow the commissioning plan process, first by reconfiguring their office operations with AWIPS at the center, producing all forecasts and warnings using AWIPS and systems interfaced with it, then transmitting these products in an "unofficial" capacity to verify communication throughput.

The commissioning of the AWIPS for a given configuration is determined by the Director, NWS, based upon evidence that:

a. AWIPS technology and supporting systems associated with a given configuration are ready for operational use.

b. NWS is ready to use the AWIPS in routine operations.

c. Users of AWIPS products and services have been notified in advance to allow them sufficient time to make modifications to their systems. (The scope of this education and notification is covered in the *Internal and External Communication and Coordination Plan for the Modernization and Associated Restructuring of the National Weather Service*.)

The user notification process is discussed further in Section 5. Any time these factors cannot be satisfied, the commissioning of additional AWIPS for this configuration will cease.

Once the Director, NWS, decides sufficient progress has been made, the next phase of the process commences—namely, the *Evaluation Phase*. During this process, an Evaluation Official (EO) at the local office or center evaluates the performance of these system components and the operational and system administration personnel's readiness to use and support AWIPS in routine operations. As part of the commissioning process, AWIPS is evaluated to demonstrate that it meets the following major criteria:

1. AWIPS can be used in the operational setting as the ***primary system*** by the NWSFO, and NWSO or RFC for the preparation of weather forecasts, guidance products, and data acquisition.

   Note: NCEPs will be evaluated in a like manner, but it is recognized that the generation of graphical weather products must remain with legacy systems until AWIPS can produce this capability.

2. AWIPS can reliably transmit weather products over the WAN, using the WMO header format.

   Note: There will still be a requirement for communicating official weather products over the legacy communication networks until they are decommissioned. Refer to Appendix C for a complete discussion on the transition between AWIPS and these legacy networks.

3. AWIPS can replace legacy systems including, but not limited to, AFOS and its adjunct equipment.

   Note: The decommissioning of PUPs will not occur until a later software build. Other systems used for risk-reduction activities may or may not remain, depending on the capabilities of AWIPS Build 4.2. Examples of these systems include SOO/DOH workstations, PC-GRIDDS, etc.

Any deficiencies encountered during the evaluation phase are addressed through action coordinated at the local, regional, and WSH levels. After the evaluation is completed (any deficiencies having been resolved or addressed via approved work-arounds or commissioning notes, see Section 4.1.3.1), an ***AWIPS Commissioning Checklist*** (Appendix I-B) is used to record the results of the evaluation.

The completed *Checklist* is then incorporated, by the EO, into an ***AWIPS Site Component Commissioning Report*** (Appendix I-B) and sent to the appropriate office/center management[1] for review and recommendation. This begins the *Recommendation/Approval/Implementation Phase*. This is followed by regional and national-level reviews and recommendations. These recommendations to commission the AWIPS are sent to the Director, NWS, for approval. Approval authority may be delegated, at the discretion of the Director, NWS, to regional directors (RD).

When the report has been approved at all appropriate levels, the approved commissioning is implemented as described in Section 4.1.6. Notification to external users, describing the changes taking place upon commissioning, precedes the actual date. **Official** use of AWIPS WAN in the conduct of appropriate NWS service operations begins during the commissioning evaluation phase and continues through the day of commissioning. When AWIPS is commissioned at the site, there will no longer be any dependency on the legacy communications network, i.e., AFOS or Alaska Region Operations Network (ARONET).

[1] Office/center management refers to the meteorologist-in-charge (MIC), hydrologist-in-charge (HIC), or NCEP center director.

4.1 Commissioning Process

The AWIPS commissioning process for each field office, **Figure 4-2**, consists of the following periods:

1. Government Acceptance of AWIPS Installation and Site Components
2. Determination of Operational Readiness (DOR)
3. Completion and Approval of the *AWIPS Site Component Commissioning Report*
4. Implementation of Commissioning Authority

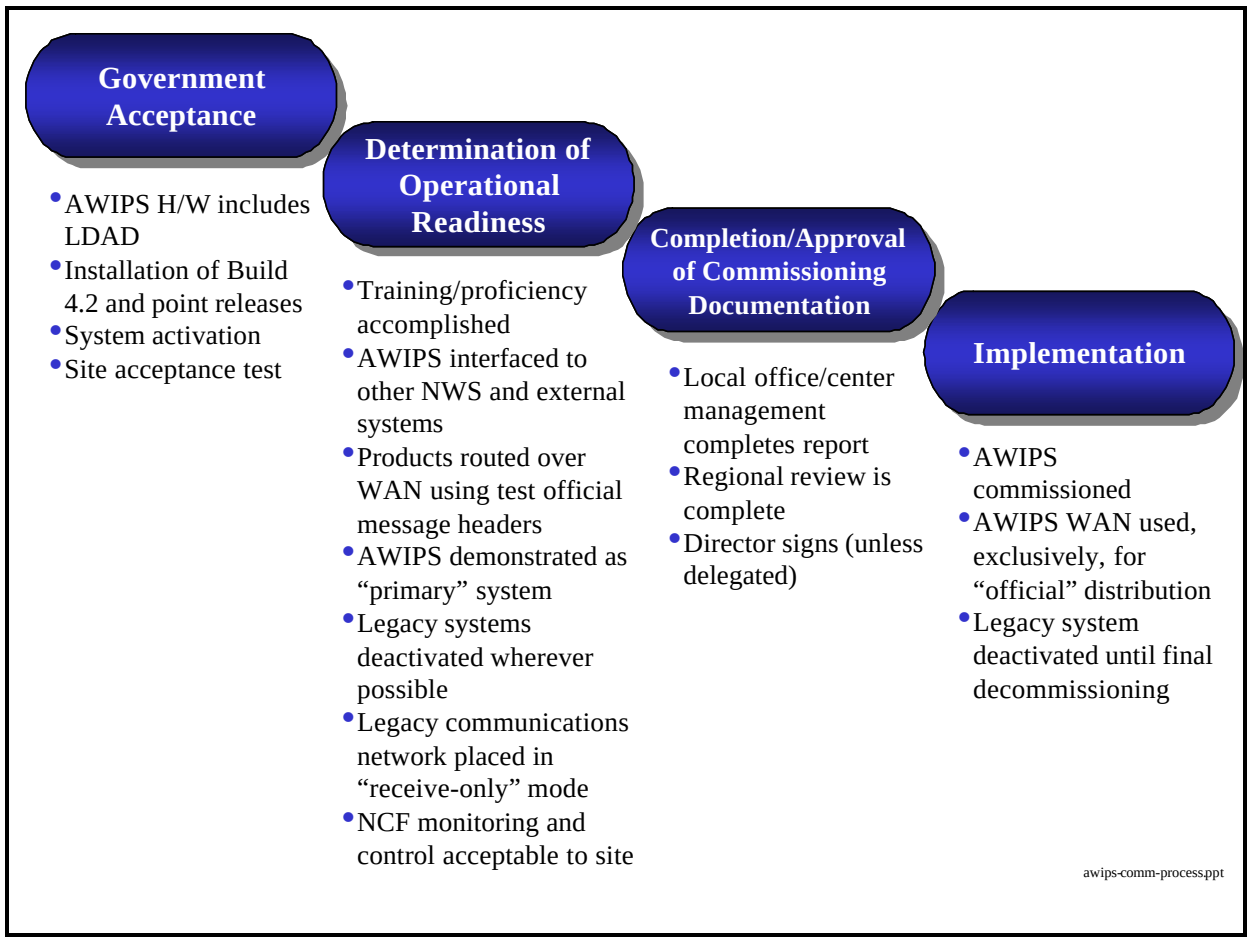

Figure 4-2 General AWIPS Commissioning Process

4.1.1 Government Acceptance of AWIPS Installation

With the deployment of the equipment to the site, four main periods commence:

1. Installation of the AWIPS, including the retrofit of LDAD equipment and Build 4.2 (including any point releases) software.

2. Activation of the AWIPS on-site.

3. System checkout/acceptance testing.

4. Site acceptance of the AWIPS.

When the site acceptance testing (SAT) is successfully completed, an AWIPS Acquisition Office (AAO) representative signs the Facilities DD Form 250, Material Inspection Report, and an AAO representative signs the property transaction request supplied by the Administrative Support Center. The AAO accepts, for the Government, all AWIPS units. The prime AWIPS contractor produces an *AWIPS Site Survey* for each site, taking into consideration all the factors required, before the AWIPS equipment can be installed. This transfers ownership of the system from the contractor to the NWS.

The Government acceptance of AWIPS installation is a prerequisite to the initiation of the AWIPS commissioning process. The *Commissioning Evaluation Criteria* (Appendix I-A to Addendum I) requires the existence of a signed Facilities DD Form 250 accepting the AWIPS. For the purpose of initiating an AWIPS commissioning process, its acceptance must be complete, that is, all critical open items must have been satisfactorily resolved. The EO must determine, through coordination with the site electronics management staff, any open items that are deemed critical to AWIPS commissioning.

4.1.1.1 Activation of the AWIPS

Activation is normally coincident with the acceptance of an AWIPS along with Build 4.2 and is defined as the point in time when the accepted AWIPS installation begins to be operated by NWS personnel for purposes of familiarization and operational evaluation.

After the AWIPS unit is delivered and accepted, the system is configured to meet operational conditions. For example, the AWIPS has to be configured for local conditions, that is "localization." At this point, connections are transferred to weather systems not yet interfaced with AWIPS (e.g., ASOS, CRS, MicroART, NWWS) in accordance with the *Commissioning Evaluation Criteria* described in Appendix I-A to Addendum I. Certain systems used for risk-reduction activities can be retained for supporting research and development activities. In general, these systems will not be interfaced directly into the site AWIPS.

With the activation of AWIPS, there also are impacts on the communication network traffic. Official NWS products (i.e., forecasts, guidance, and warnings) are transmitted from the local office through the AWIPS WAN in "test" mode. At this point, operational staffs are able to depend on AWIPS for the conduct of major operational aspects of their office, including the wide use of LDAD to disseminate weather information to external users.

The final step in the activation process is the reconfiguration of the legacy communication network to allow receipt of products from AWIPS, but not to transmit products. This would demonstrate that AWIPS is not dependent on the legacy network. Upon reconfiguration, the office makes the transition to AWIPS as the primary system. For specific details on this and other transitions, refer to Appendix C.

4.1.2 Determination of Operational Readiness

With activation of the AWIPS, the DOR period begins. DOR is the time when the AWIPS is utilized by the Government for the purpose of evaluating site components in accordance with prescribed AWIPS commissioning evaluation criteria specified in Addendum I. Completion of the DOR period occurs when the EO submits the *AWIPS Site Component Commissioning Report* to the appropriate office/center management for approval.

The DOR period consists of three parts:

a. Familiarization and Proficiency Training

b. Operational Evaluation of AWIPS

c. Preparation of the *AWIPS Site Component Commissioning Report*.

During the DOR, the AWIPS is operated in a *pre-operational mode* and will not be used for the official distribution of NWS products over the WAN. Hydrometeorological data (i.e., files) used for the preparation of products and for other purposes may be issued over the WAN to other offices and external users.

4.1.2.1 Familiarization and Proficiency Training

The familiarization and proficiency training period begins at Government acceptance. Members from the office staff attend the Centralized User Training (CUT) course offered at the NWS Training Center and additional training is performed on-site, referred to as On-site User Training (OUT), during system installation.

> **Note:** All CUT classes will have been completed prior to the release of Build 4.2 to field sites. During this period, operations and maintenance personnel acquire experience with the AWIPS equipment. The familiarization and proficiency training period continues during the evaluation period until all operational staff members using AWIPS have been trained and become proficient with the system.

4.1.2.2 Commissioning Evaluation Categories

Figure 4-3 depicts the general commissioning categories used to evaluate AWIPS during the commissioning process. Each of these areas serves as the basis for the specific criteria established in the *AWIPS Site Component Commissioning Evaluation Package*, Addendum I Appendix I-A.

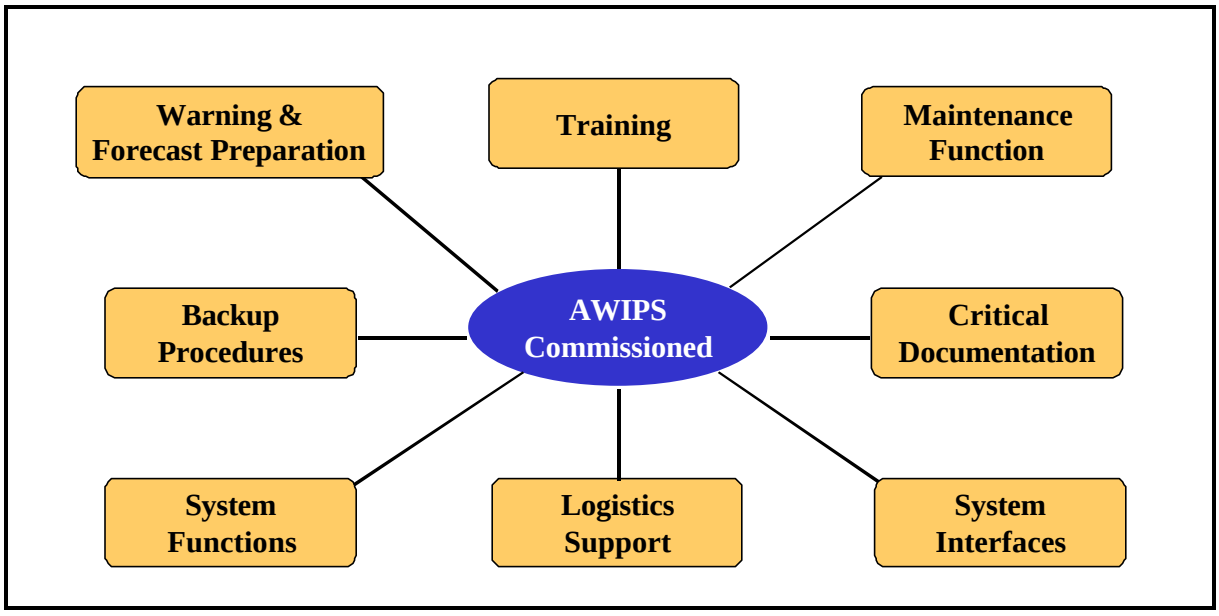

Figure 4-3 General Commissioning Categories to be Evaluated

During this period, the EO has the primary responsibility for the AWIPS evaluation and completion of all necessary documentation. The EO uses the *AWIPS Commissioning Checklist* (Appendix I-B) and the *Commissioning Readiness Report* (CRR) (Appendix I-D) for performing the evaluation (Addendum I). The *Commissioning Evaluation Criteria* is a detailed set of guidelines used by the EO to determine compliance with site requirements for:

- Government acceptance of the AWIPS installation.

  Verifies the acceptance by the Government of all the equipment from the prime contractor and the completion of the necessary transfer/property documentation.

- Adequate availability of trained operations and system administration personnel.

  Requires office staff members to be trained to operate and administer the AWIPS through formal course work. Also requires staff to be proficient in the use of AWIPS in the performance of their duties.

- Satisfactory performance of system interfaces.

  Systems required to be interfaced into AWIPS need to be validated through established procedures. The reconfiguration of communication networks also needs to be validated as part of the commissioning process. Examples of systems to be interfaced include: ASOSs, WSR-88Ds, NWWS, MESONETs, LARC/ARCs, ALERT/IFLOWS, etc.

- Satisfactory support of associated NWS forecast and warning services.

  Verifies through everyday experience and, in some cases, actual procedures to be performed, AWIPS' ability to support the warning and forecast mission of each office type, i.e., NWSFO/NWSO/RFC/NCEP. Examples of areas included in this category range from technical coordination with office community, evaluation of AWIPS in everyday operations

over a significant period of time to determine "robustness," transmission of weather products using the ACN in test mode, and scientific validation of AWIPS applications and map backgrounds.

- Proper functioning of service backup capabilities.

  This category consists of both the system and service components using a building block process. If an office experiences system or service backup during the evaluation period and it worked properly, no further checkout is required. If the office is forced into a backup scenario and the procedure failed, a remedy needs to be developed for future failure episodes. If none was experienced during this period, a formal checkout procedure will be invoked.

- Adequate documentation for operations and system administration.

  Documentation under consideration includes user manuals, system administration manuals, technical documentation for local applications development, and WSOM chapter updates impacting field operations with the introduction of AWIPS.

- System functions and security.

  A new category specific to system functions such as validating localization of system to site conditions; ability of NCF to monitor site conditions; archiving; validation of communication throughput of locally produced products, as well as those from other locations; and ensuring that AWIPS is secure to outside users.

The final aspect of the commissioning evaluation is the validation that the AWIPS can perform the service backup function as stated in Section 3.5.2. When service backup is demonstrated successfully, the EO informs the office/center management that the site is ready for commissioning.

4.1.2.3 Preparing for the Commissioning Evaluation

Before the AWIPS commissioning evaluation commences, the site must perform a series of activities leading up to the DOR. The following items must be completed before the commissioning evalutation period begins:

1. The site reviews Addendum I and develops a clear understanding of what the criteria are.

2. Critical interfaces to LDAD take place (including ASOS, MicroART, and any other systems transferred from their legacy host system connection to AWIPS). In addition, the dissemination features of AWIPS are now activated to support local users.

3. If the office has an NWWS connection, this connection is transferred at this time. There may be a need to rearrange sites providing official NWS products to the NWWS. With the reconfiguration of sites to the AWIPS WAN, the manner in which NWWS issues products may require reconfiguration.

4. Local and regional PC-based or UNIX workstation applications needing to remain on-site are transferred from their host connection to various AWIPS asynchronous connections.

5. The CRS is transferred from the legacy host system to the AWIPS LAN. There may be a need to reconfigure this connection with other formatter components, such as a PC.

6. Other systems, such as specialized workstations and connections, are brought into the AWIPS environment so that no critical interfaces remain on the host system.

7. The PUES line providing the RCM and HDP products to the host legacy system is turned off and official NWS products are issued over the WAN. The dedicated line connections to AWIPS now receive the RCM and the DPA (HDP is AFOS-based only) for transmission over the WAN.

   Note: Products continue to flow over both the legacy and AWIPS communication networks during transition. At the time the WAN is used exclusively (i.e., the commissioning switch is set to "commissioned") and official NWS products are issued over the WAN, the RCM/HDP products are eliminated on the PUES line.

8. All office forecast preparation operations are now performed using AWIPS and the system interfaced into it. There is no dependency on receiving or viewing products through AFOS, the ABT, or any PC or workstation AFOS application (e.g., PC-AFOS). If the office cannot operate without resorting to one of these legacy components, it is not ready for commencing the evaluation.

9. The AFOS/AWIPS asynchronous connection is reconfigured from a bi-directional mode to "receive only" on AFOS mode. For complete details on this reconfiguration process, refer to Appendix C.

10. When the site is ready, it will begin exercising the WAN increasing the amount of time until the site is able to transmit all products over the WAN.

4.1.2.4 Operational Evaluation Period

The operational evaluation period is the documented time an AWIPS is evaluated for operational performance and NWS' readiness to use and support the system in routine operations. The office/center management initiates the operational evaluation period and coordinates with the appropriate EO and regional AWIPS focal point when the site is ready to commence. The Operational evaluation normally starts with delivery of AWIPS (including LDAD hardware), Build 4.2, and reconfiguration of office systems to meet the commissioning evaluation criteria as described in Section 4.1.2.3. The operational evaluation period may last for several to many months, depending on various factors, such as the time of year the evaluation is performed. For example, an office would want to verify performance of AWIPS across seasons to verify the generation of different suites of weather products.

4.1.2.5 AWIPS Site Component Evaluation Package

The EO for a given AWIPS is responsible for conducting the operational evaluation using the *AWIPS Site Component Evaluation Package* (Addendum I). Addendum I contains the following:

- **Site Component Commissioning Evaluation Responsibilities**: A description of the responsibilities of the individuals involved in an AWIPS commissioning evaluation.
- **Description and Instructions**: A general overview of the commissioning activities, and roles and responsibilities throughout the process (Addendum I).
- **AWIPS Commissioning Evaluation Instructions**: The AWIPS evaluation criteria and checklist for the site-specific AWIPS configuration and instructions for its completion (Appendix I-A, Addendum I). Relevant documentation critical for AWIPS commissioning can be found in Appendix I-C.
- **Commissioning Report Forms and Requirements**: Instructions and forms for the preparation and transmittal of the Commissioning Report (Appendix I-B, Addendum I).
- **Example of the CRR**: A compendium of systems, services, and site-specific information required for transitioning to AWIPS.

  Note: The Systems Commissioning Manager (SCM) will make available the *CRR* either via the commissioning web page (refer to Section 5) or through the regional AWIPS focal point. For an example of this report, see Appendix I-D, Addendum I.
- **Example of the Completed AWIPS Site Component Commissioning Report:** An example showing what the completed report will contain (Appendix I-E, Addendum I).

4.1.2.6 Scheduling and Initiation

The scheduling of individual AWIPS commissioning activities is the responsibility of the SCM in coordination with the regional AWIPS focal point and the field site. These schedules are determined by the readiness of a given AWIPS configuration for inclusion in the commissioning process, its dependencies on the transition of other associated offices, and the workload of the regions.

Preparations for the initiation of these site-specific commissioning activities are accomplished by:

a. The appointment and training of an EO by the site office/center management.

b. The SCM furnishing a copy of the ***AWIPS Site Component Commissioning Evaluation Package*** and ***CRR*** to the appropriate regional AWIPS focal point for each AWIPS to be commissioned within their domain. This is to take place at least 90-120 days prior to the anticipated start of the DOR period of the AWIPS commissioning process discussed in Section 4.1.2.

c. The SCM notifying users of the initial target date for the AWIPS commissioning. This notification is to take place within 60-90 days of the target commissioning date.

d. Local dissemination of the intended date for commissioning, including notification of the local external users through the LDAD.

4.1.2.7 Completion of the Console Replacement System Commissioning Report

A separate checklist may have been completed and approved by each NWSFO and NWSO, commissioning the CRS for field operations. The CRS commissioning should be completed prior to the commissioning of AWIPS. Refer to Addendum II for information concerning the commissioning process for a CRS.

4.1.2.8 Completion of Legacy System Decommissioning Report

A separate checklist will be completed (Refer to the *Legacy System Site Component Decommissioning Plan*) allowing the field office to decommission legacy systems performing the primary mission and containing, at a minimum, the following verification:

- All connections of systems to the AFOS configuration control monitor (CCM) have been transferred to AWIPS (recognizing that the CCM will continue to exist for performing selected operations during the transition period).
- All interfaces to associated sites (e.g., spin-down WSOs not yet closed, WSCMOs, RFCs, CWSUs, FAA) are no longer required.
- Critical local applications have been transferred to the AWIPS environment.
- CRS can be interfaced into AWIPS without the need of the legacy communication networks to provide necessary products.
- An inventory of legacy equipment to be decommissioned after the commissioning of AWIPS.

4.1.3 Commissioning Work-Arounds and Notes

When commissioning criteria cannot be satisfied, and a component from a legacy system is required to remain, a "work-around" must be invoked. The work-around applies only to those elements applicable to AWIPS. When commissioning criteria/elements are not being satisfied, one of two paths will be followed:

1. Commissioning is suspended for the site, or if the problem is too great, a general halt is applied to all sites under commissioning evaluation.

2. The site is offered a temporary solution, i.e., until AWIPS can perform the function or the requirement is eliminated. Temporary solutions fall into two categories:

    - Commissioning work-arounds
    - Commissioning notes

Figure 4-4 as well as the following sections illustrate the differences between these two paths.

Work-arounds and commissioning notes allow the process to continue without adversely impacting the system commissioning. However, they must be tracked by the agency for eventual closure. The SCM, in coordination with agency staffs, determines whether a component limitation can be worked around or deemed too obtrusive to warrant such action.

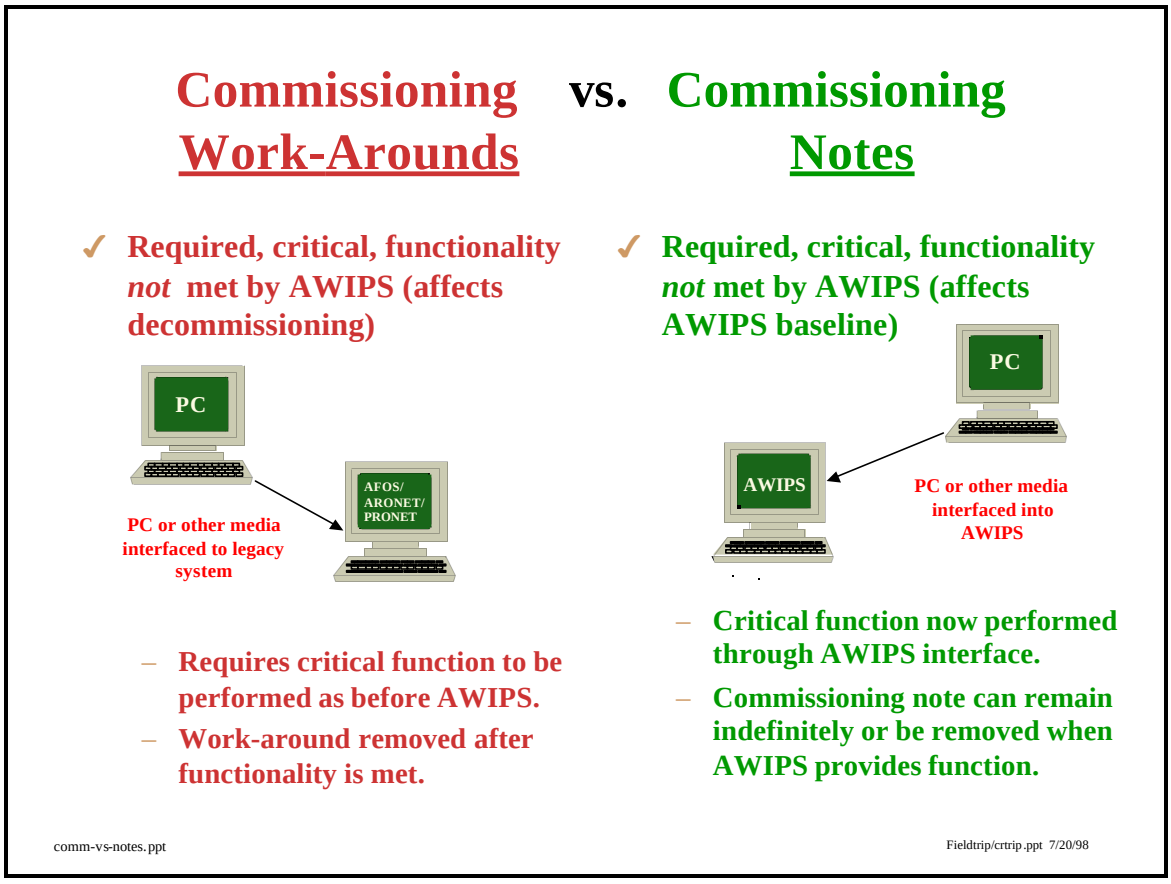

Figure 4-4 Commissioning Work-Arounds and Notes

4.1.3.1 Work-Arounds

As depicted in **Figure 4-4**, a work-around is a temporary solution requiring a legacy system to remain in operation due to a limitation of AWIPS functionality. For example, the PUP would remain in operation at most offices, since AWIPS will not have sufficient functionality in the Build 4.2 time-frame to replace this system. However, some offices may consider AWIPS capabilities "good enough" for their radar operations and, as a result, may choose not to invoke this work-around. **There are currently no work-arounds in effect requiring AFOS communications to continue after the AFOS/AWIPS transition period.**

Not all system limitations can invoke a work-around. For example, if the map background registrations were off by, say 75-100 miles, it would not make sense to argue continued use for issuing forecasts/warning with such a deficiency. Therefore, a work-around must be logical in its description when invoked in the commissioning report. If a work-around is not logical, a correction to the problem is the only reasonable solution. Work-arounds allow the process to continue without adversely impacting the system commissioning. They are documented in the commissioning report with a specific number assigned to each one and standard verbiage describing what the work-around solution is and any conditions associated with it.

4.1.3.2 Commissioning Notes

Commissioning notes, unlike work-arounds, document temporary solutions as something that still utilizes AWIPS as the primary system, affects the AWIPS system baseline, but does not depend on a legacy communication network to remain. The temporary solution becomes part of the AWIPS baseline configuration until AWIPS can perform this function. Examples of commissioning notes include the interfacing of single- or multi-function personal computers performing specific functions AWIPS does not yet provide; procedures unique to one or more field sites, but not necessarily applicable to all sites; and the transmission of specialized products from another platform directly into AWIPS (e.g., data collection system interfaced into LDAD). In all cases, there will not be any dependency to a legacy system or network other than to provide AWIPS the residual functionality needed to act as the primary system in use. This means AFOS communications can never be written as a commissioning note, since the dependency on AFOS communications for receiving products would be fundamental to AWIPS operations. The note would mention the reason why the functionality is required and some expectation as to when it might be removed.

4.1.4 Preparation of AWIPS Site Component Commissioning Report

The *AWIPS Site Component Commissioning Report* (Appendix I-B) serves as the instrument by which commissioning of the site is recommended and approved. This report (see Addendum I for details) consists of:

- *AWIPS Site Component Commissioning Report* Cover Page,
- AWIPS Site Component Commissioning Recommendation Approval Form,
- *AWIPS Commissioning Checklist* (including the annotated CRR), and
- Documentation for each evaluation which is not applicable to the site or requires either a work-around or commissioning note.

During the commissioning evaluation phase, the EO coordinates with office and regional staff to complete the forms and prepare them for office/center management signature. The EO also uses the *CRR* to validate that all necessary connections for their local systems have been transitioned to their office. For example, the migration of ASOSs to specific AWIPS sites would occur during this period.

The EO confirms the accuracy and completeness of the *Commissioning Report* by signing it, then having the office/center management sign it. The *Commissioning Report* is then transmitted (via express mail) to the appropriate RD or NCEP director for review.

The approval authority for the commissioning of an AWIPS is, initially, with the Director, NWS. As implied in Section 4.1.4, this authority could be delegated to the RD level at the discretion of the Director, NWS. Procedures for both are discussed in the following subsections.

4.1.4.1 Director, NWS, as Approving Authority

Upon receipt of the appropriately completed *AWIPS Site Component Commissioning Report*, the office/center management initiates the NWS review/approval process described below.

Note: To expedite the review process, reviewers should ensure that a substitute (with approval authority) has been appointed in case of their absence.

1. The office/center management reviews the *AWIPS Site Component Commissioning Report* and confirms its completeness and accuracy by signing it. The office/center management retains a copy and sends the original *Commissioning Report* (via express mail) to the regional AWIPS focal point.

2. The regional AWIPS focal point coordinates the regional review of the *AWIPS Commissioning Checklist*. When the region is ready to recommend commissioning, the *Commissioning Report* and *Checklist* are forwarded to the RD. The RD, in turn, recommends the commissioning of the AWIPS by signing the *Commissioning Report* and sending it (via express mail) to the SCM.

3. The SCM reviews the *Commissioning Report* and coordinates any necessary action within WSH. When ready to recommend commissioning, the SCM signs the *Checklist*.

4. The SCM issues notice within the NWS and to other users of the commissioning date. (The SCM will have issued an initial commissioning notice approximately 90-120 days previously.) The tentative time and date for commissioning will be 1200 local time, approximately two (2) weeks after the date the SCM signs the *Checklist*.

5. The Director, NWS, signs the *Commissioning Report* if in agreement with the recommendations and returns it to the SCM for implementation.

6. After the site is commissioned, the SCM issues final commissioning notices within NWS and to other users.

Note: For commissioning AWIPS at NCs, the duties of the regional AWIPS focal point are assumed by the NCEP AWIPS focal point. The duties of the office/center director are assumed by each NCEP director or Chief, Meteorological Operations Division.

4.1.4.2 Regional Director as Approving Authority

The approving authority for commissioning may be delegated by the Director, NWS, to the RD. The NWS review/approval process when the RD is the approving authority is described below.

1. The MIC reviews the *AWIPS Site Component Commissioning Report* and confirms its completeness and accuracy by signing the it. The MIC retains a copy and sends the original *Commissioning Report* (via express mail) to the regional AWIPS focal point. (A copy of the Approval Form when the RD is the approval authority is shown in Appendix I-B.)

2. The regional AWIPS focal point coordinates the regional review of the checklist, then sends a copy of the checklist to the SCM.

3. The SCM reviews the *Commissioning Report* and coordinates any necessary action within WSH. When ready to recommend commissioning, the SCM signs the *Checklist*.

4. The SCM issues notice within the NWS and to other users of the commissioning date. (The SCM will have issued an initial commissioning notice approximately 90-120 days previously.) The tentative time and date for commissioning will be 1200 local time, approximately two (2) weeks after the date the SCM signs the *Checklist*.

5. The Director, NWS, signs the *Commissioning Report* if in agreement with the recommendations and returns it to the SCM for implementation.

6. When the region is ready to approve commissioning, the RD signs the commissioning report/checklist.

7. The regional AWIPS focal point informs the SCM that the commissioning has been approved.

4.1.5 Implementation of Approved AWIPS Commissionings

As indicated in Section 4.1.4, the commissioning can take place, based upon the approval of the Director, NWS, or at the discretion of the Director, NWS, by the approval of the appropriate RD. The commissioning of some sites may require temporary work-arounds. These work-arounds will be replaced with operational procedures common to all applicable sites at the earliest possible date.

4.1.6 Commissioning Implementations

The SCM, in coordination with the region, APO, and NWSTG, will establish the official commissioning date/time (consistent with NWS requirements) and issue the required notices within the NWS and to external users.

On the commissioning date, the AWIPS will commence **official** distribution of weather service products over the WAN.

> **Note:** There will still be a requirement for forwarding official weather products over the legacy communication networks for a period of time until they are no longer required. Refer to Appendix C for a discussion of this transition plan. This will be controlled through switching directory updates by the NCF, SMCC, and NWSTG controlling the direction of NWS products over various communication networks. Likewise, the switching of official WAN-routed products to the Service Record Retention System will commence to ensure continuity of the official archive record.

The office/center management ensures that the following actions have taken place at approximately 1200 local time on the official commissioning date:

1. Coordinate with the NWSTG and NCF actions that are to take place.

2. Notify local users that a change in operations is to commence on the appropriate date and time.

3. Monitor ACN traffic to verify that products issued after this time have been received correctly.

4. Ensure passwords have been changed in accordance with the agency security policy.

If weather conditions are such that performing steps 1-3 would disrupt operations, the process could be postponed until a later time.